

IN THE CLAIMS

1. (Previously Presented) A system comprising:
a chamber configured to house a substrate for processing;
an energy source coupled to the chamber;
a system controller configured to control the introduction of at least two metal constituents to a focused ion beam and to control the introduction of the focused ion beam; and
a memory coupled to the controller comprising a computer-readable medium having a computer-readable program embodied therein for directing operation of the system, the computer-readable program comprising:
instructions for controlling the energy source and for introducing the metal constituents by mixing the at least two metal constituents and introducing the at least two metal constituents into a chamber in which a focused ion beam contacts the at least two metal constituents to form a first alloy layer over a substrate.
2. (Previously Presented) The system of claim 1, wherein the program further comprises instructions for controlling the introduction of each of the at least two metal constituents selected from the group consisting of cobalt, metal carbonyl, molybdenum and tungsten.
3. (Previously Presented) The system of claim 2, wherein the program further comprises instructions for forming more than one alloy layer, wherein a second alloy layer is formed over the first alloy layer.
4. (Original) The system of claim 3, wherein the second alloy layer is created from a second multi-metal layer which is exposed to an alloy process.
5. (Original) The system of claim 4, wherein the alloy process involves the second multi-metal layer exposed to one of a thermal treatment and to a focused ion beam.

Claims 6-11 (Canceled)

12. (Previously Presented) A system comprising:
a chamber configured to house a substrate for processing;
an energy source coupled to the chamber;
a system controller configured to control the introduction of at least two metal constituents to a focused ion beam and to control the introduction of the focused ion beam; and
a memory coupled to the controller comprising a computer-readable medium having a computer-readable program embodied therein for directing operation of the system, the computer-readable program comprising:
instructions for controlling the energy source and for introducing the metal constituents by introducing at about the same time at least two precursor gas sources in which each precursor gas source contains a respective one of the at least two metal constituents and the focused ion beam contacts the at least two precursor gases to form a first alloy layer over a substrate.
13. (Previously Presented) The system of claim 12, wherein each of the at least two metal constituents is selected from the group consisting of cobalt, metal carbonyl, molybdenum and tungsten.
14. (Previously Presented) The system of claim 13, further comprising:
forming more than one alloy layer, wherein a second alloy layer is formed over the first alloy layer.
15. (Previously Presented) A system comprising:
a chamber configured to house a substrate for processing;
an energy source coupled to the chamber;
a system controller configured to control the introduction of at least two metal constituents to a focused ion beam and to control the introduction of the focused ion beam; and
a memory coupled to the controller comprising a computer-readable medium having a computer-readable program embodied therein for directing operation of the system, the computer-readable program comprising:

instructions for controlling the energy source and for introducing the metal constituents by forming a first layer of a first of the at least two metal constituents and a second layer of a second of the at least two metal constituents to create a multi-metal layer and performing one of thermal treatment and introducing focused ion beam to at least a portion of the multi-metal layer to form a first alloy layer over a substrate.

16. (Previously Presented) The system of claim 15, wherein each of the at least two metal constituents is selected from the group consisting of cobalt, metal carbonyl, molybdenum and tungsten.

17. (Previously Presented) The system of claim 16, further comprising:
forming more than one alloy layer, wherein a second alloy layer is formed over the first alloy layer.

18. (Previously Presented) The system of claim 17, wherein the second alloy layer is created from a second multi-metal layer which is exposed to an alloy process that involves the second multi-metal layer exposed to one of a thermal treatment and to a focused ion beam.

19. (Previously Presented) The system of claim 15, wherein the instructions for forming a first and second layer include instructions to heat the first and second layer sufficiently to re-crystallize a metal component of the at least one metal formed in the at least one of the first layer and the second layer.

20. (Previously Presented) The system of claim 15, wherein the instructions for forming a first and second layer include instructions for controlling one of a laser, a continuous wave laser, a pulsed laser, and an argon laser to heat at least one of the first layer and the second layer.